

ABSTRACT

An implantable left ventricular assist device using a cylindrical cam is provided, which is produced in a compact and module form and implanted in a patient who suffers from an acute cardiac insufficiency, to thereby enable oxygen to be supplied smoothly toward the heart of the patient and reconstruct the declined function of the heart. The implantable left ventricular assist device includes an actuator for generating a linearly reciprocating driving force, a pusher plate which performs a linearly reciprocating motion by the actuator, a blood sac which is contracted and expanded due to compression by reciprocating the pusher plate and the restoration of a sac itself, and a chamber for accommodating the blood sac, the pusher plate and the actuator, combining the same physically, and protecting the same within the body of a patient. The implantable left ventricular assist device is produced in the compact and module form and is safely and simply implanted in a patient who suffers from an acute cardiac insufficiency. The implantable left ventricular assist device assists a reduced blood amount of aorta, increases the blood amount of aorta, enables oxygen to be supplied smoothly toward the heart of the patient, and then reconstructs the declined function of the heart. Thus, an effect of expediting a recovery of the lowered heart function can be obtained.